Awaiting wetter storm pattern, Snowpack and Reservoir storage, Delta pumping ruling, Folsom Spillway Groundbreaking, California Snow Trivia

Nothing impressive develops over the next couple of days, although rain is in the forecast through Saturday over the Northern half of the State.

The North coast, including the Smith and Eel river basins will see between 1.0" and 1.5" of rain Thursday night, with lighter amounts down the coast. The Northern Sierra, Feather River Basin, and Shasta areas will get about .50" by Friday morning. Sacramento will have a round of showers on Thursday night/ Friday morning. Another cool, moderately wet system crosses Friday night/ Saturday. That one will spread precip as far south as the Bay area and Yosemite, although the amounts range from 0.25" to 0.75". A big ridge of high pressure takes over thereafter.

Look for a stretch of dry weather through the New Year, including a rain/snow-free New Year's Eve.

The longer range outlook is a bit more optimistic in terms of storm strength. We do need wet weather. The 4" received last week was a good bump, but it would take 10 more weeks at that intensity to result in a 'normal' year. The seasonal average total precip over the 8 Stations in Northern California that DWR tracks is 50.0". As of December 21, we were at 11.2", or 22% of an average water year. Perhaps an additional tenth will be tallied from over the holiday.

The good news is that there are model projections of a series of storms beginning on January 3rd. It looks like the tap may get turned on for several days in a row. Its far enough away to not call this 'convincing,' but it does give a forecaster hope.

Snow pillow measurements (automated sensors) for December 21st are:

Northern Sierra 61% Central Sierra 53% Southern Sierra 77%

Statewide average is 58% of average for this date, or 16% of April 1 average.

The snow survey measurements are conducted near the 1st of the month from January through May, and those readings are considered the more accurate. The first Highway 50 Snow course measurement will be conducted at Phillips Station on January 3rd. Your local newscast will cover those figures, so it might be worth checking on.

Statewide reservoir storage is averaging about 83%. This time last year, the average was higher, but that's because we came off a wet year previously. The 83% is not extreme, however. By comparison, California drought years of record had the following statewide average reservoir storage on December 1:

1976 63%

1977 35%

1992 56%

>From Chief Hydrologist Maury Roos, here are a few broad brush estimates for what kind of water year would be needed to achieve 2 scenarios.

First, to restore statewide reservoir storage to 'normal' would require an 85% of average runoff year. Second, to break even, and not slip further toward drought conditions would require a 70% of average year.

(These are 'ballpark figures.') The odds of these occurring depend on how much rain and snow we accumulate, and there's still time in the season to attain those runoff levels. The first runoff projections made December 1st forecast the Sacramento River runoff to end at 74%. That would achieve the 'break even' scenario, but not the reservoir restoration gap.

Allocation estimates based on the final Wanger ruling of December 14 to protect delta smelt, are between 7 and 30 % less than would have been available without the court decision. If this is a dry water year, State Water Project customers will receive between 7 and 22% less than they would without the pumping curtailment. If this is a normal water year, exports will be reduced between 22 and 30%. During normal years there is more water to be sent down the State Water Project, so timing modifications through the year are not as feasible as during dry years.

Current allocation estimates are 25% of requested supply. For more on the ruling, go to:

http://www.water.ca.gov/news/newsreleases/122407wanger.pdf

Work began on the Folsom Dam Spillway construction project on December 13th, but mark your calendars! On January 11th, they will hold a groundbreaking.

California Snow Trivia, for weather buffs. The record maximum winter snowfall was in Tamarack, in 1906–07. 884" of snow fell. The record maximum 1-day snowfall was at Giant Forest, with 60" on January 18–19, 1933. The highest average annual snowfall is 470.7" in Soda Springs.

Look for another installment of this newsletter on January 2, or thereabouts.

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